

ARCHÆOLOGIA AELIANA



I.—THE CASTLE, NEWCASTLE UPON TYNE.

By W. H. KNOWLES, F.S.A., A VICE-PRESIDENT.

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To-day it is difficult to visualize the very strong promontory site, selected for the New Castle upon Tyne in 1080, by Robert Curthose the eldest son of the Conqueror. The steep slopes which surround it are now covered with buildings which obscure the natural strength of the position.

On the north the fortress was protected by a deep ravine, at the foot of which flowed a tributary of the Lort burn. On the east and south the ground descended precipitously until it reached the shores of the Lort burn and Tyne. Only on the western side was there comparatively level ground (Fig. 1).

Viewed from the river seven centuries ago, the castle must have been singularly striking, comparable to, though less imposing than, the castles of Durham or Bamburgh, whose majesty of situation is yet unimpaired.

The plateau on which the castle stands is about 100 feet above the level of the river. The area enclosed was between two and three acres. No doubt the Romans and the Anglo-Saxons occupied the site, but only as an out-work commanding the bridge and the passage of the Tyne.

It is clear that the area and the configuration of the

site are alike unsuited for a Roman station or for an Anglo-Saxon burh. It has been suggested that the vicinity of the present Collingwood street was the site of the Roman fort, and the position has strong claims to be so regarded. The Monkchester of the Angles, wherever its position, is not to be sought on the headland selected by the Norman Robert, which is eminently fitted for the erection of a detached fortified place such as a stranger uncertain of his neighbours would desire,¹ but not for a community where the Anglo-Saxon noble lived with and among his subjects, and provided shelter for his neighbours, after the nature of a fortified borough.

In every way the site was essentially such as the Norman conqueror required. It was a strong place naturally defended, easily accessible from the sea, and from the south by a road constructed by the Romans which might also be regarded as a convenience in case of necessary retreat. With slight effort the place could be readily isolated from unfriendly folk, and so fortified as to be easily defended by a comparatively small force.

There does not exist any portion of the castle erected by the Normans in the eleventh century. The castle, as was common at that period, would be of timber of the mount and bailey type, that is, a wooden tower surmounting an earthen mound enclosed with a stockaded rampart and ditch, together with an appendant court or bailey similarly enclosed with a crested palisade.²

It is computed that no less than fifty or sixty such

¹ The Norman not only distrusted his enemies, but also on occasion doubted his garrison, which included a number of mercenaries.

² See the great mound at Durham, where the wooden buildings doubtless existed until bishop Hatfield in 1345 built the stone shell keep. At Morpeth, where the Ha' Hill north of the present castle probably represents the castle of William de Merlay, destroyed by William Rufus at the time of Mowbray's rebellion. At Lincoln, where the shell keep stands on a high and steep bank within the Roman fort. At Cambridge, of which see plans, *Cambridge Antiquarian Society*, Vol. XI, and at York, see view of the Baile Hill, T. P. Cooper's *York Castle*, p. 227.

castles were built by William I within twenty years after 1066 in suitable strategic positions on the main lines of communication, to secure the conquered country and overawe the hostile population.

Such was the castle henceforth to be known as the New Castle upon Tyne; it continued in use for nearly a century. Hurriedly thrown up, such fortified enclosures were equal to the attacks of rivals, but not sufficient to withstand the siege of a formidable royal army. The earthen ramparts could be mined and sapped, and the

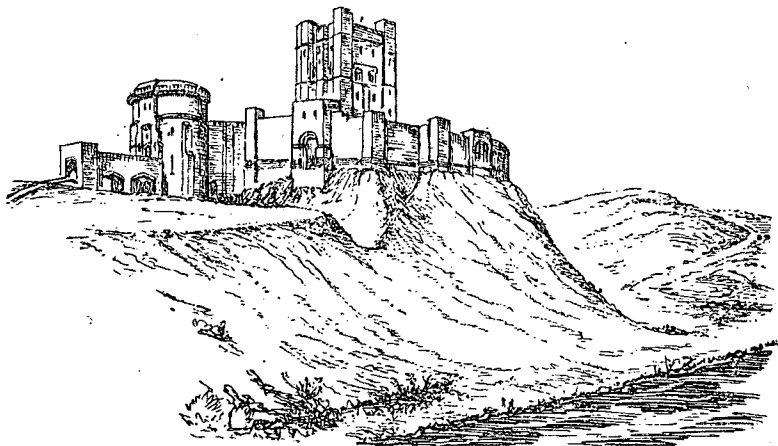


Fig. 1

wooden structures fired by a determined assailant, as was demonstrated at Newcastle upon Tyne during the rebellion of the Norman barons (1095) when the place was in the possession of Robert Mowbray, earl of Northumberland, and surrendered to the attack of William Rufus.³

Until the early years of last century, a mound of fair dimensions existed at Newcastle, to the south of the present stone keep, which it may be assumed represented all that survived of the eleventh century *motte*.

³ In 1138 David of Scotland invaded the county and did not meet with defeat until the battle of the Standard. Afterwards the county was surrendered by Stephen to the Scots, and regained by Henry II from king Malcolm.

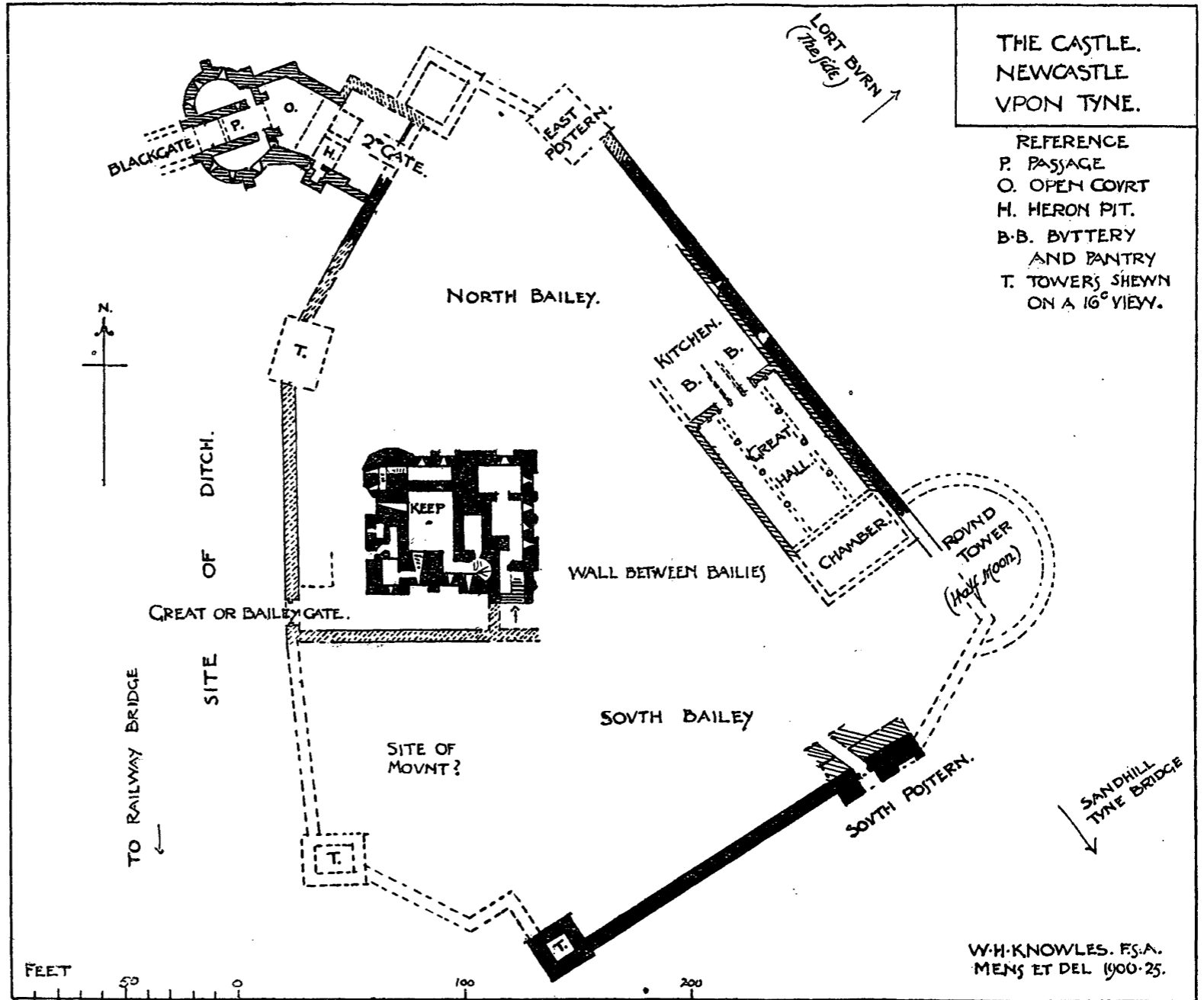
THE STONE CASTLE

We will now consider the transformation of the original earthen castle of Robert Curthose into a castle of stone, by Henry II, of which the keep, a goodly portion of the enceinte wall and a postern gate fortunately remain.

In figure the plan of the enclosed area was roughly triangular, with bulging sides, the apex being to the north and the base to the south. Approximately the distance from north to south was 420 feet, and the length of the base 340 feet (Plate II). The enceinte was placed on the verge of the steep declivity which encircled the site, excepting on the west side, where a deep ditch across the neck of the promontory isolated the castle and constituted it a formidable fortress.⁴ A cross wall divided the area into north and south, or outer and inner baileys. The keep (see Plate I, Frontispiece) was placed in the south-west corner of the outer, but accessible from the inner bailey. The great gate of the castle was in the western curtain near to the keep. There were two posterns, one a little distance from the north end of the east curtain wall, and the other in the south wall, yet standing. The enceinte was strengthened, as appears in a sixteenth century view, by square, mural towers, two of which capped external angles on the south-west, a third intercepted the curtain north of the great gate, and another, on which the east and west curtains abutted, enveloped the apex of the north bailey.

The south postern and curtain to the west of it are built on the side of the declivity towards the river and the bridge which spans it, about 20 feet below the level of the keep. The postern, about 43 feet on the face, projected 6 feet beyond the curtain, which also was 6 feet

⁴ The position of the ditch before the west curtain was approximately the east side of the present approach to the railway bridge.



PLAN OF CASTLE, NEWCASTLE UPON TYNE.

in thickness. On the southern face are two lofty semi-arches in two rings. The western one, forming a portal, is recessed the depth of the projection, and the curtain pierced by a low segmental arch and vaulted passage (Fig. 2). The opening, 4 feet 2 inches wide, has rebated jambs and a hole for a drawbar to secure the gate. The east arch has two oversailing courses at the springing over a chamfered string. Between the arches the masonry projects as a buttress. At a later date, the

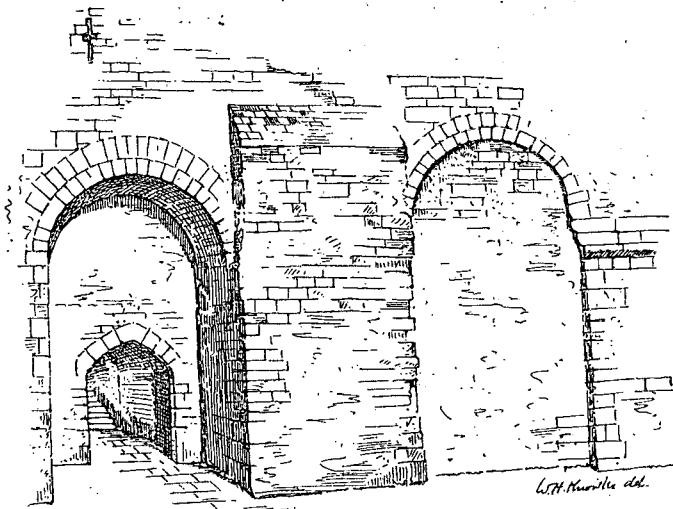


Fig. 2. The South Postern.

depth of the postern was increased about 17 feet, the passage for half the length being vaulted.

The curtain to the west of the postern indicates a probable thickness of 6 feet, and there is still evidence of the tower which capped the south-west angle. Another portion of the curtain 6 feet in thickness exists on the east side of the north bailey, now overbuilt, but visible in 1906 when I obtained the section shown on Fig. 24 (side of the great hall). A third section occurs at the north-west corner to the rear of the Blackgate (Plate III), which shows a massive plinth of nine chamfered courses.

There are no remains extant of the several mural

towers indicated on the plan except the mutilated foundation of that at the south-west angle. They appear to be square and of slight projection, scarcely intended for flanking purposes, the scientific achievement of which was not attained until the thirteenth century.

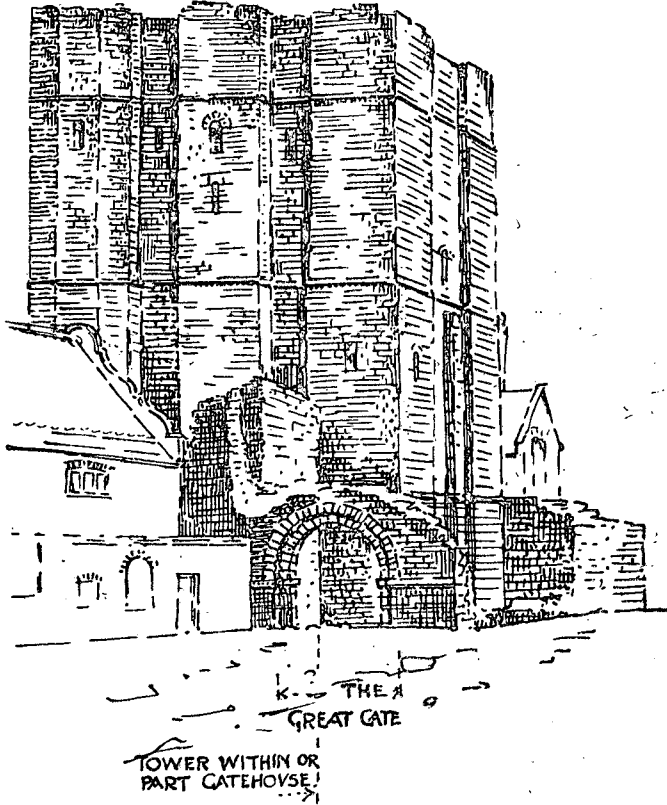


Fig. 3. The Keep from a Sketch *c.* 1810.

The great or bailey gate, termed in 1237 the gate of the castle near the tower, is delineated on a drawing made before its demolition in 1810 (Fig. 3). Thereon is an archway of two semi-circular orders springing from a chamfered impost moulding continued along the outer face of the wall. The accumulated earth obscures the

lower part of the gate and the form of its base mouldings, which may have been of similar character to the plinth near the Blackgate.⁵

On the same sketch is a tower-like structure within and to the north of the gate. Either a separate building, or it may be part of an important tower gatehouse. At Ludlow the castle was defended by a strong gatehouse previous to its conversion into a great tower,⁶ and at Richmond the Norman door (part of the original curtain) formed the interior gateway of a gatehouse afterwards the keep.⁷

The position of a portion of the cross wall dividing the baileys, immediately to the south of the keep, is clearly shown on Fig. 3; its precise site (Plate II) was ascertained in January, 1923.⁸ The great height of the enceinte may be observed on these views and at the south postern, which measures 30 feet apart from additions and alterations.

The enceinte as we have reviewed it was erected in the Norman period contemporaneous with, or probably previous to, the keep. Possibly also on the site of the ramparts of the earthen castle. Its construction may very well be represented by the expenditure recorded in the exchequer rolls of 1168, when £102 was spent on the "making of the New Castle upon Tyne."

We have not yet considered the round tower or half moon battery, a considerable work which capped the south-east angle of the south bailey. Its round form does not assimilate with the general conception or lay out of the enceinte. It was probably built to shield the great hall as well as to strengthen the enceinte at an important point.

The external face of the round tower, as seen in the

⁵ The broad spreading base added to the resistance against rams and bores, and caused dropped stones to rebound at varying angles.

⁶ *Archæologia*, LXI, 310.

⁷ *Military Architecture in England*, A. H. Thompson, 93.

⁸ *Proc. N.C. Soc. of Antiq.*, Ser. IV, 1, 10.

sixteenth century sketch,⁹ is relieved and strengthened by a number of buttresses, and the parapet embattled. On Buck's view¹⁰ (1745) are some huge shapeless buttresses; they are additions implying structural defects between the dates.

The castle enceinte preceded by a century the building of the town walls, with which it has no connection. The latter skirted the river to the south of the castle about 90 yards distant from it.

In the thirteenth century, after the erection of the great hall, the limited area within the fortified enclosure must have been seriously overcrowded, for therein was the keep, the great hall with its kitchen and necessary adjuncts, the houses and towers of the barons whose duty it was to defend the castle, the garners, stores, stables, and the barracks of a considerable force.

THE KEEP

The principal interest in the castle centres in the keep, which is in a tolerably perfect condition (Plate I, Frontispiece). It is situated, as was usual, on the most elevated part of the site, and so placed as to defend the weakest point, in this case the level approach from the west to the site. It did not form part of the enceinte as at Porchester, but like Carlisle and Rochester was just within it.

The position commanded the great gate and the baileys, and afforded protection to, and easy communication with, the rampart walks of the west curtain and the cross wall to the south of the keep. (Plate II).

The keep is rectangular on plan, and measures on the exterior above the plinth and between the projections 58 feet 6 inches from north to south, and 50 feet east to west exclusive of the forebuilding 15 feet in width, which

⁹ *Arch. Ael.*, N.S., IV, 112.

¹⁰ *Ibid.*, N.S., IV, 112.

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covers its eastern face. From the level of the basement floor to the top of the modern flat roof the height is 81 feet.

On the interior it comprises three floors, a vaulted

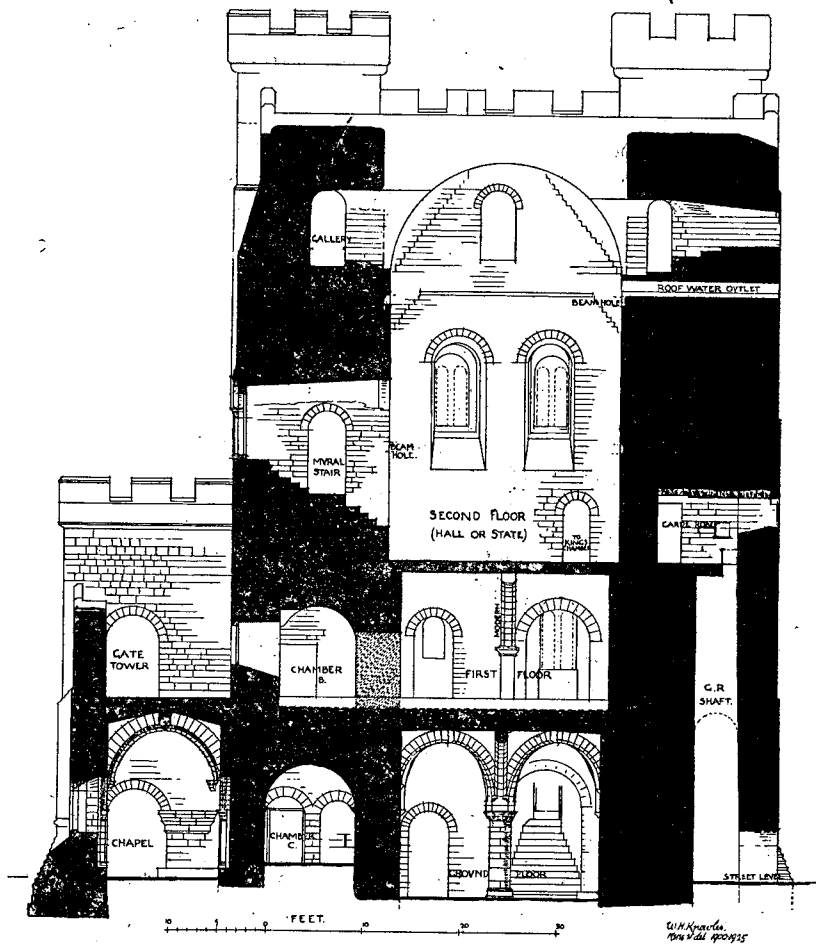


Fig. 4. Section through Keep, looking South.

basement occupied by the garrison, an intermediate floor possibly the private rooms or residential quarters of the constable, and an upper floor, the hall with its triforial galleries, for state and business purposes (Fig. 4). On

the exterior the elevations are divided by moulded or chamfered sets-off into three unequal stages, above which was a high battlemented wall screening the roof (Plate I). The plinth is a massive one of nine chamfered courses over which is a bold roll moulding, interrupted by the deep recesses between the projections. Broad pilasters of two feet projection enclose three angles. They are

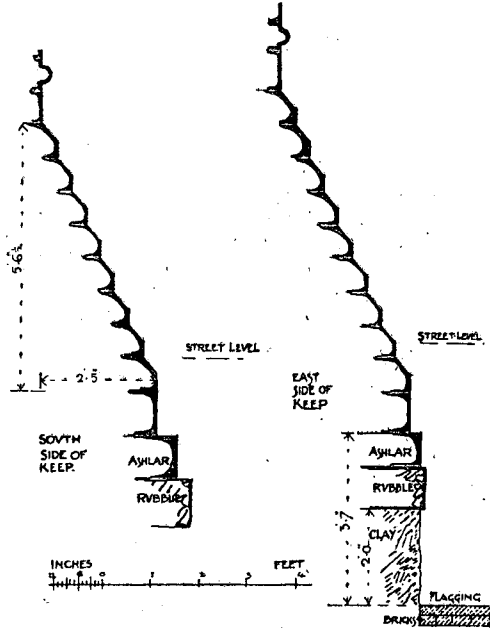


Fig. 5. Section of Plinth.

continued above the roof and appear as square turrets as at Hedingham, Rochester and Dover. The fourth, the north-west angle, is enveloped in multangular form of six sides, an advance on the square form of tower from which the garrison could only command the field at right angles. The obtuse sides are an approach to the round form which superseded the flat towers.¹¹ In the south-east

¹¹ At Rochester the usual square tower capped the south-east angle. It was undermined by king John and was rebuilt in round form.

turret is a newel stair which ascends from base to summit. On three faces is an intermediate buttress. That on the east side terminates below the set-off of the upper stage (Plate I), and on the north and south at the middle stage. The mid-projection on the west side is a much larger one. It was continued to the summit and included the garde robe shafts (see the sketch, Fig. 3) before the additions of the modern battlements. On the east side is the forebuilding, it reaches to half the height of the keep and screens the straight stair leading to the main entrance on the second floor level.

The only external features with architectural details that relieve the austerity of the elevations are four double windows to give light to the hall, the entrance door to the same and a gate or door in the middle tower of the forebuilding.

The keep is built of sandstone in irregular courses, and strangely unlike Norman ashlar, which is invariably of square or approximately square stones. At Newcastle the length of the stones on the face is three to four times the height of the courses. On the interior the stones forming the ashlar face are shorter on the face and more of the Norman type. The whole of the vaults are worked in rubble plastered on the underside. The walls are of considerable thickness, sufficient for the mural chambers, galleries and staircases with which they are honeycombed.

We are spared the labour of an investigation for comparative details whereby to determine the date of the building. Being a royal castle the period and the cost of its erection are set out in the Pipe rolls. The expenditure in 1172 being £185 6s., in 1173 £240 5s. 4d., in 1174 £12 15s. 10d., in 1175 £186 15s. 4d., in 1176 £144 15s. 4d., and 1177 £141 12s. 11d., together showing a total cost of £911 10s. 9d.,¹² and the time of its construction 1172 to 1177. We are further enlightened as to the name of the architect or master builder, one Maurice, whose good services merited in 1175 an extra

¹² See *Vestiges of Old Newcastle and Gateshead*, p. 47.

payment of 20s. This Maurice can be no other than the *Mauricius Ingeniator* who designed the tower at Dover ten years later. - A careful examination of the two buildings would alone justify the assumption. Both are equal in strength and have many details in common, but the Dover tower is superior in its dimensions and its architectural features, and is more skilfully designed and executed.¹³

We will now consider in detail the various apartments. The chief of these, the state or official room, occupied the upper or second floor, its entrance, the only access to the keep, being, as at Dover and Norwich, at the level.

THE FOREBUILDING

That the order of perambulation of the interior may not be interrupted it will be well firstly to describe the approach to the main entrance (Fig. 7). The straight stair which led to it was covered by the forebuilding and further protected by three towers, as at Dover and Castle Rising. The lower tower formed a portal at the foot of the stair, the middle was gated, and the upper contained a room hereafter described.

Ascending nineteen steps of the existing stair we reach the middle tower, 16 feet by 14 feet, of solid masonry save the raking barrel-vaulted passage 5 feet 6 inches in width, which was protected by a gate of two arched orders 4 feet 10 inches in the opening. The inner arch is segmental with square edges over rebated jambs, in rear of which is a hole for a sliding bar to secure the gate. The outer arch is semicircular with moulded voussoirs

¹³ The details of the newel staircase, the vaults and cornices of the mural chambers, the position of the main entrance and well room at the second floor level, and the external pilasters and set-off are almost identical with Newcastle. Dover measures 96 feet by 96 feet by 83 feet in height, with walls 21 to 24 feet in thickness. The Pipe rolls show that £2,000 was spent on the tower of Dover between the years 1181 and 1187. The size of the baileys was about 6 acres.

and label. The arch springs from a shaft with a cushion capital and moulded base, and in the middle of its height a broad bonding course worked on the jamb stone.

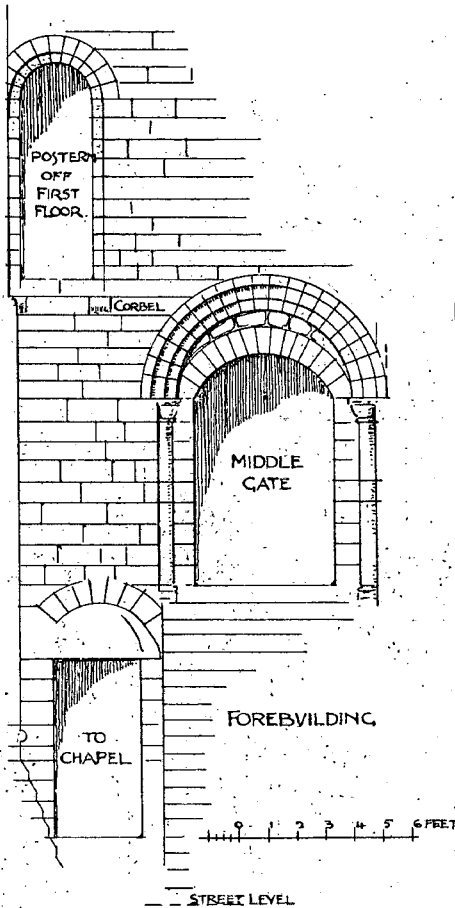


Fig. 6. Detail of Middle Gate Tower.

On either side of the stair is a small arched lamp niche with dished sill for oil (Fig. 7).

The third tower is near to and by the side of the entrance to the hall or state room of the keep; it served the double purpose of an ante or vestibule thereto, and

of a guard room commanding the stair, as at Dover and Castle Rising. It measures on the interior 13 feet square, and is lighted by two windows, one in the north and one

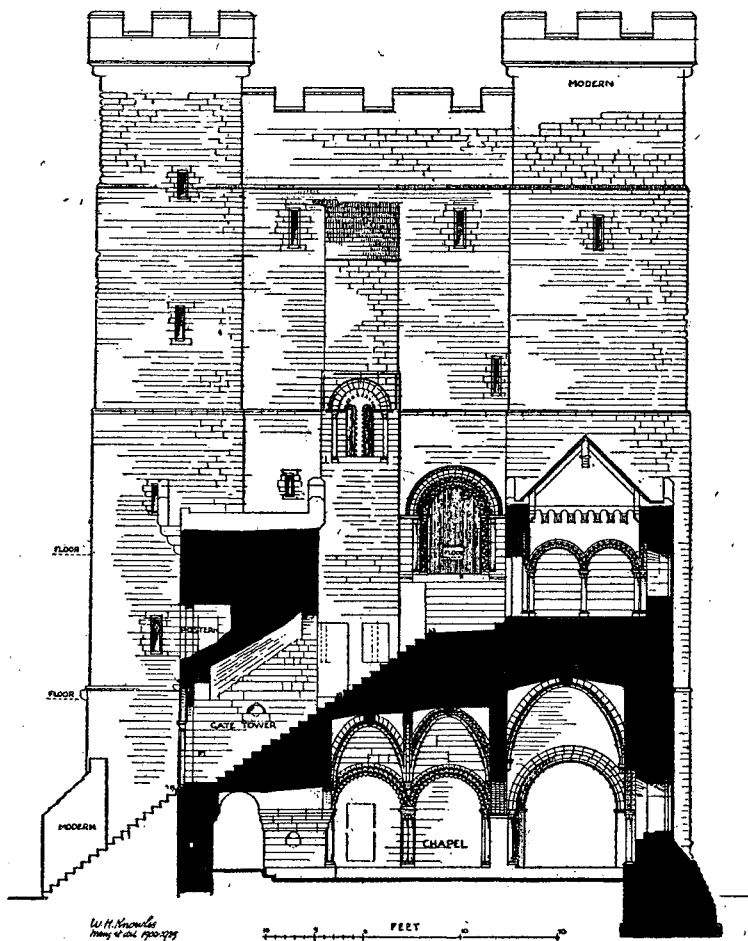


Fig. 7. East Elevation.

in the east wall; and entered by a square-headed door on the south side. The interior decorations are entirely modern, and it is uncertain how far they follow the original design. On three sides is an arcade (Fig. 7), of semi-arches with chevron ornament springing from

shafts with voluted capitals and moulded bases. At the eaves level is a corbel table, and on the north side a hooded fireplace.

The basement of the forebuilding is occupied by the chapel, but it will be convenient to defer the description of it until we have completed the consideration of the keep as a military structure.

We will now return to the main building. The entrance to it at the second floor was intended as a defensive measure, being more difficult to attain than if placed at a lower level. It also, an important consideration, necessitated all who entered to pass through the main apartment under observation of its occupants.

THE HALL

The hall (Fig. 8) measures 30 feet from north to south, by 23 feet 9 inches from east to west by 30 feet to the springing of the modern vault.¹⁴ Admission is by a barrel-vaulted passage 6 feet in width. The door opening, a modern reproduction (Fig. 7), is semicircular of two orders, the inner enriched with chevron ornament continued down the jambs but arranged in panel fashion. The outer order, with chevron ornament divided by an angle roll and surrounded by a billeted label, springs from a moulded impost over a nook shaft with moulded base and capital.

The apartment is lighted by four two-light windows, two in the south placed high over a mural chamber, and one in the east and one in the north wall (Fig. 4). On the exterior the lights, 14 inches wide, had round arches with a double quirked roll on the angle, within a large containing arch similarly moulded and with a double chamfered label (Fig. 9). The outer order is carried on a detached shaft with moulded base and voluted or

¹⁴ As at Scarborough, Newcastle was not divided by a mid-wall, as was the case at Bamburgh, Dover and elsewhere.

scalloped capitals, the abacus of which is continued as an impost to the jambs of the small lights. The mullion, 9 inches wide, dividing the light, has a hollow chamfer on

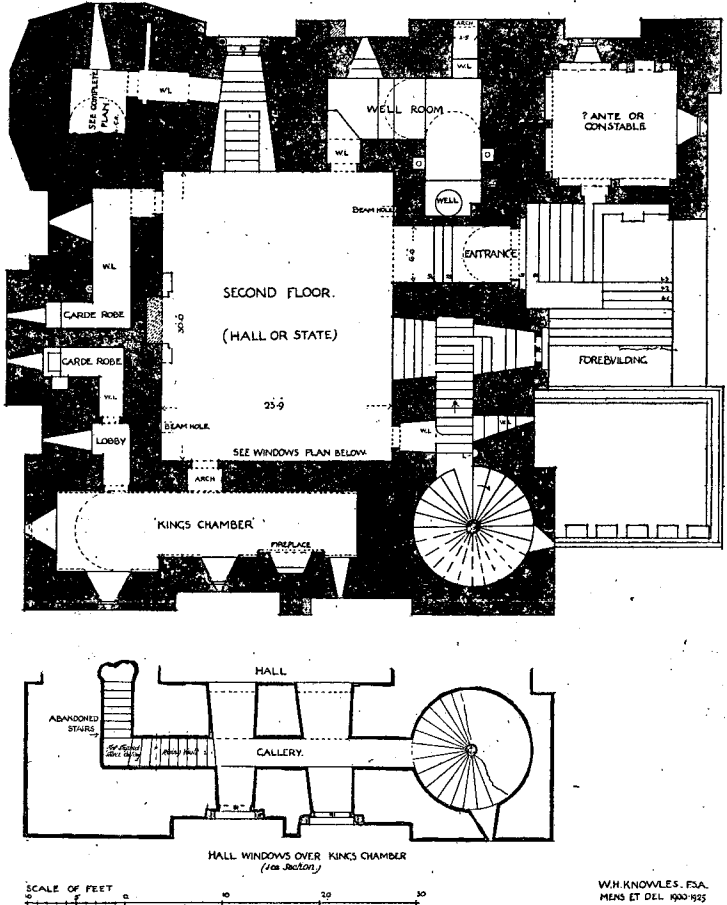


Fig. 8. Plan of Second Floor.

each angle with a worked stop at the top to receive the arched roll moulding.

The openings of the south windows have splayed jambs and a barrel vault which finishes on the interior in a plain semi-stone arch (Fig. 4). The north and east windows are at a much lower level. A straight mural staircase

passes across or through the jambs of the east window (Fig. 8).

The vaulted passage or gallery midway in the thickness of the south wall intersects the jambs of the south windows, and makes a right-angled turn in the west wall. About the angle are fifteen steps (lower portion Fig. 8), blocked by solid masonry. Investigation in 1894 proved that they had been discontinued at this point, evidently in consequence of a change in the design,¹⁵ possibly determined in 1175 after the invasion of William the Lion,

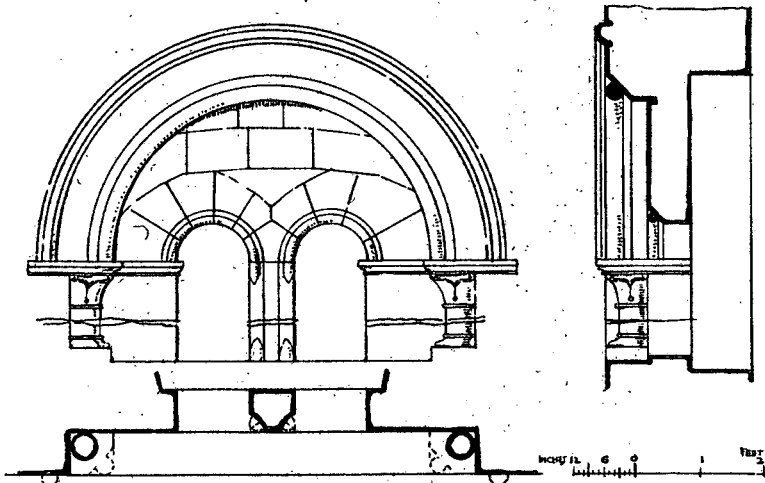


Fig. 9. Detail of North Window.

whose activities clearly arrested the progress of the work, as witness the slight outlay in 1174. Then the idea of a staircase in the west wall towards the enemy was apparently abandoned in favour of the existing straight stair in the east wall towards the bailey.

At 30 feet above the floor level is a barrel-vaulted mural passage encircling the hall. Towards the interior are six openings, two in each side and one at each end. The hall was covered by a ridged roof whose axis was north and south. There are indications of the rake of

¹⁵ An examination of the steps, *Arch. Ael.*, N.S., XXV, 96.

the roof in the south wall¹⁶ (Fig. 4), and evidence of the side gutters is afforded by the outlet channels carried to the exterior through the thickness of the walls, one in the middle of the west gutter, and one in the north wall at the end of the east gutter¹⁷ (Plan, Fig 10). The vaulted openings in the end walls have semi-arches and rebated jambs for doors, either for communication in time of need with those below, or leading on to a floor

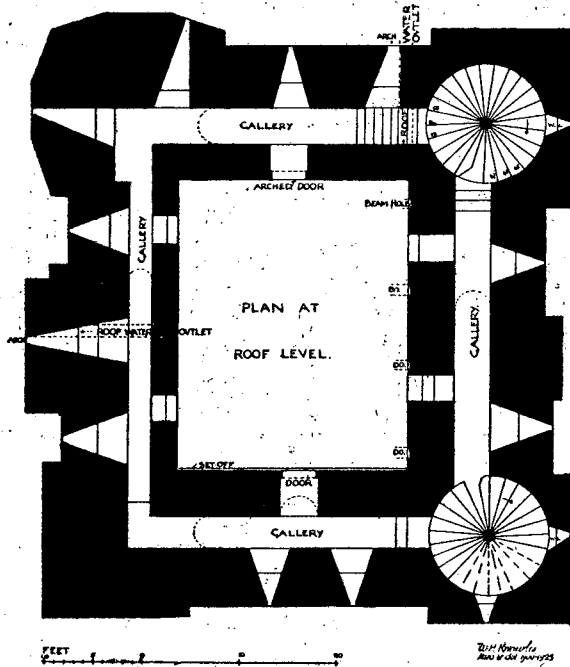


Fig. 10. Plan of Upper Part of Hall.

at the level. In the east wall are four holes intended to receive floor joists or roof timbers (Fig. 10). Whether the vaulted openings in the side walls gave merely on to

¹⁶ Usually at first covered with shingles or stone tiles, afterwards with lead, as at Newcastle in 1240.

¹⁷ Discovered by the writer in 1894. That on the west is an ashlar channel 14 inches by 26 inches, with an arched opening and broken gargyle on the exterior. *Arch. Ael.*, N.S., XXV, 93.

the roof gutters and the parapet walk above, or served some definite purpose, cannot now be determined as the great modern vault has obliterated the details (Fig. 4). The mural passage (Fig. 10) was lighted by a number of square-headed loops with widely splayed jambs, except that in the north wall near the gutter outlet, which is wider with an arched head. At 11 feet from the floor of the hall are holes for beams in the east and west walls a few feet from each end, convenient for a narrow gallery, that at the south end combining with the large recesses of the windows (Fig. 8).

KING'S CHAMBER

Opening off the south end of the hall is a long, low, mural apartment, commonly known as the king's chamber, and evidently used as a withdrawing room or solar. It was a pleasant room with a fireplace and four windows; three to the south overlooked the river, and that on the west

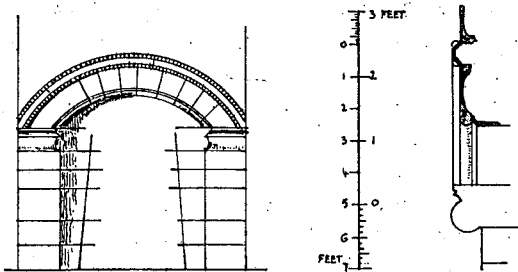


Fig. 11. Fireplace, King's Chamber.

the gateway to the castle. It measures 31 feet by 7 feet, increased to 8 feet 6 inches at the west end. The ceiling is a barrel vault covered with plaster springing from a chamfered cornice. The entrance door is rebated, and both interior and rear arches are of stone; the interior cornice is carried over the opening. The windows, originally loops, now increased in width, have widely splayed jambs and arched heads. The fireplace (Fig. 11)

has splayed jambs and back with segmental arched head with a double quirked roll and a double chamfered and billeted label. The head springs from an impost with quirked abacus over a bold roll. The flue, as at Scarborough and Rochester, continued but a short distance, and the smoke issued on the outer face of the wall, now covered by the masonry of a new flue carried to the roof. The exterior buttress originally terminated at the lower level. A square-headed door at the west end of the north wall opens on to a lobby giving on to a latrine, the shaft for which is in the thickness of the wall; both have loops and both flat wooden ceilings.

Opening off the hall by a door at the north end of the west wall is another latrine with shaft contiguous to the former; it is reached by a long passage lighted by two loops and provided with a small lamp recess.

THE WELL ROOM

In the north-east turret is an L shaped vaulted chamber containing the well; it is entered by an arched door with rebated jambs. In the north wall is a loop of the usual shape; and a passage opening 2 feet 5 inches wide, ceiled with wooden beams and having a semi-arch to the exterior. The well, 31 inches diameter, is 99 feet deep, and the depth of water 50 feet. It is formed of ashlar, the lowest course resting on a lead apron over a wooden curb.¹⁸ On either side is a recess for buckets, and pipe holes whereby the water was transmitted to the pier, in the middle of the basement or garrison room, and to a cistern near the postern in the middle tower of the forebuilding. An ample supply was thus assured to the garrison free from interference.

There is no apartment within the keep which answers to a kitchen. At the period an internal kitchen was a rare

¹⁸ See an examination of the well. *Proc. N.C. Soc. of Antiq.*, 3rd Series, IX, 263.

provision, the cooking being largely done in the open or in some adjacent light structure. The well room could not be so used, but its position and the door-like opening suggest the possibility of easy communication with the exterior, where might be a cooking place, the well room acting the part of a modern service room.¹⁹

In the north-west turret is a small vaulted chamber A, 11 feet 6 inches by 5 feet 9 inches, approached from a passage opening off the west jamb of the north window (Fig. 12). The door, in rebated jambs, was secured by a

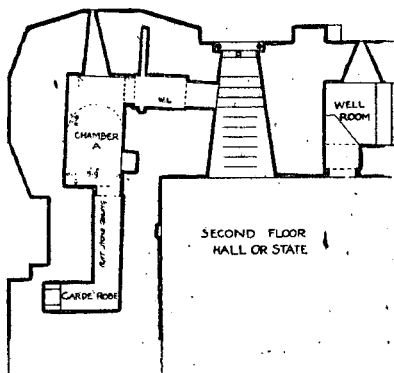


Fig. 12. Room off Second Floor.

sliding bar, the hole for which was on the outside, and the occupant thus confined within the chamber. It is lighted by a loop at the north end, and had a door at the south end opening on to a passage leading to a latrine with shaft arranged in conjunction with the previous latrines. There is no window to either passage or latrine, which are ceiled with flat stones.

We have now completed the survey of the principal apartment and its adjuncts of the second floor.

¹⁹ Mr. Parker Brewis suggests that the postern on the floor below might be used for communication to a kitchen on the south side.

STAIRCASES

Before descending to the first floor, we must observe the means of communication between the floors, which is provided by a newel staircase the full height of the keep in the south-east turret. It is 13 feet 2 inches diameter,

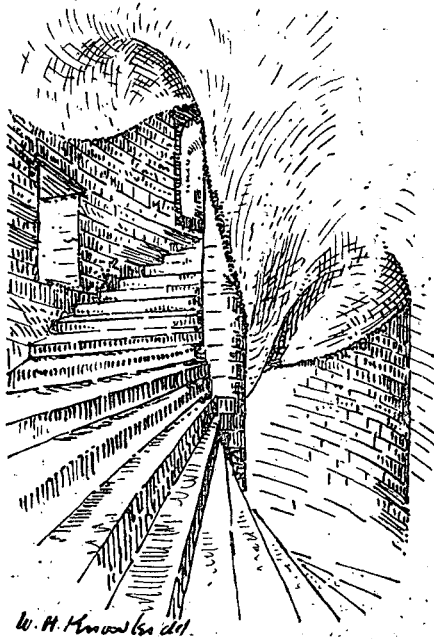


Fig. 13. Sketch of Staircase.

the steps being supported by a raking vault springing from a newel 14 inches diameter (Fig. 13). Where the door at the south-east corner of the hall opens on to the newel staircase there is another, a straight mural one, which starts from the point and ascends in the thickness of the east wall to the north-east turret (Fig. 8), where is

a short newel stair which continues to the battlements after passing the mural passage encircling the hall (Fig. 10).

Opposite the hall door is a convenient loop (Fig. 14), and a lamp recess to light the staircase at the point.

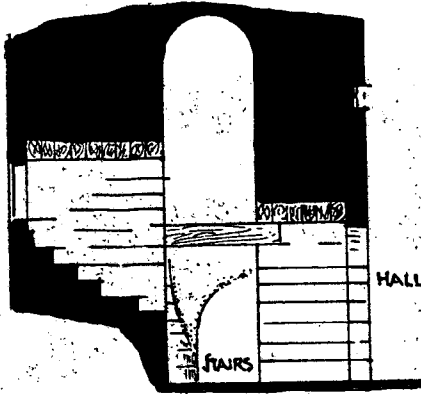


Fig. 14. Door to Staircase.

FIRST FLOOR

Descending the mural stair, and passing through a short passage, we have the rebated arched entrance to the first floor apartment (Fig. 15), which measures 29 feet by 22 feet 6 inches, and is 14 feet in height. The pier and arches now carrying the floor above are modern. The apartment is lighted by a loop in the west wall, and in the south wall by a double light window similar to those in the hall. Adjoining the last, and opposite to the entrance to the apartment, is a passage with a semi-arch in two rings to the exterior. It is now glazed, but with great probability was a door, giving by means of a flying bridge access to the parapet walk of the cross wall to the south of the keep.

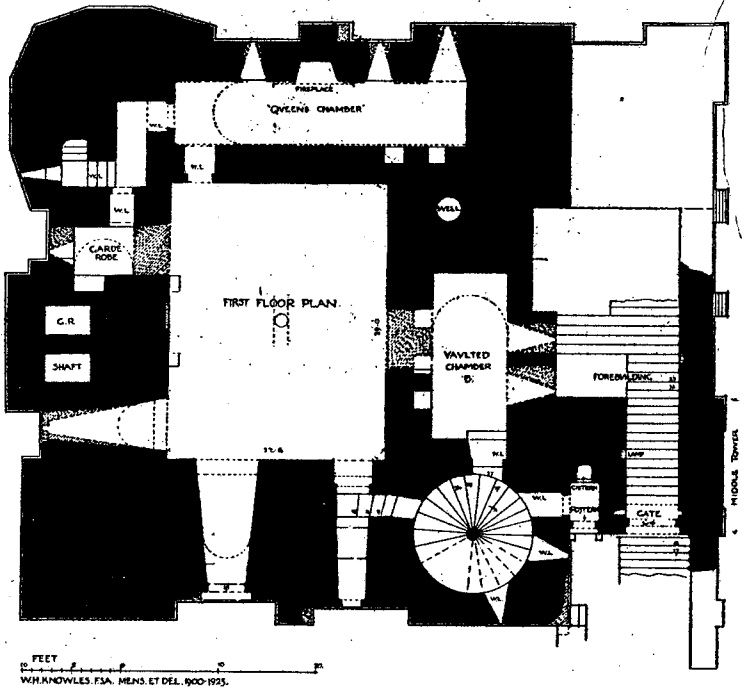


Fig. 15. Plan of First Floor.



QUEEN'S CHAMBER

The only room opening off the large apartment is one with a barrel-vault, in the north wall, now known as the queen's chamber. It is 30 feet by 7 feet with three loops having widely splayed jambs and head, and a fireplace in design similar to that in the king's chamber, except that the label is void of enrichment (Fig. 16). The flue

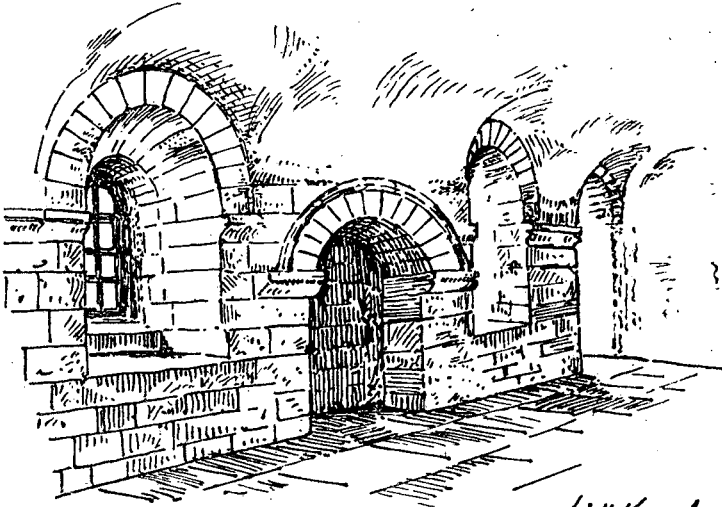


Fig. 16. Fireplace, Queen's Chamber.

is now carried up in modern masonry, but was originally of short length with an outlet on the wall face. There are two square lockers in the south wall. The vault springs from a chamfered cornice which is interrupted by the window openings. At the west end of the room is a square-headed door opening on to a latrine in the west wall, and a straight stair with vaulted ceiling. The latter descends to a vaulted mural chamber 19 feet 3 inches by 7 feet 6 inches, lighted by two loops in the north wall. This chamber occupies a mezzanine position, but for convenience is shown on the basement plan D (Fig. 17).

Opening off the newel stair (Fig. 15) is a barrel-vaulted chamber B (the vestibule to the present museum); it measures 17 feet 6 inches by 9 feet 9 inches. In the west wall were three lockers, and in the east wall two loops overlooking the stairs of the forebuilding. The position was singularly suited for the use of an officer in charge, the occupant being able to observe those who entered the keep by the forebuilding, all who traversed the newel stair or approached the first floor apartment, and in particular a door, actually a postern, in the angle, and on the south face of the middle gate of the forebuilding.

THE POSTERN

The postern opens off a small lobby containing a cistern. It is of two orders worked in one stone with semi-arches over square rebated jambs (Fig. 6). At the sill level are corbels intended to carry a gallery leading on to the lower tower and contiguous curtain. In the newel stair is a loop commanding the postern (Fig. 7). Posterns in corresponding positions may be seen at Colchester and elsewhere.

BASEMENT

Continuing to descend the newel stair, and just before reaching the level of the basement floor (Fig. 17), is a vaulted mural chamber C with chamfered cornice at the springing. It measures 16 feet by 9 feet 6 inches, and is entered by a square-headed door in an arched recess to the interior; an adjacent recess is similarly arched,

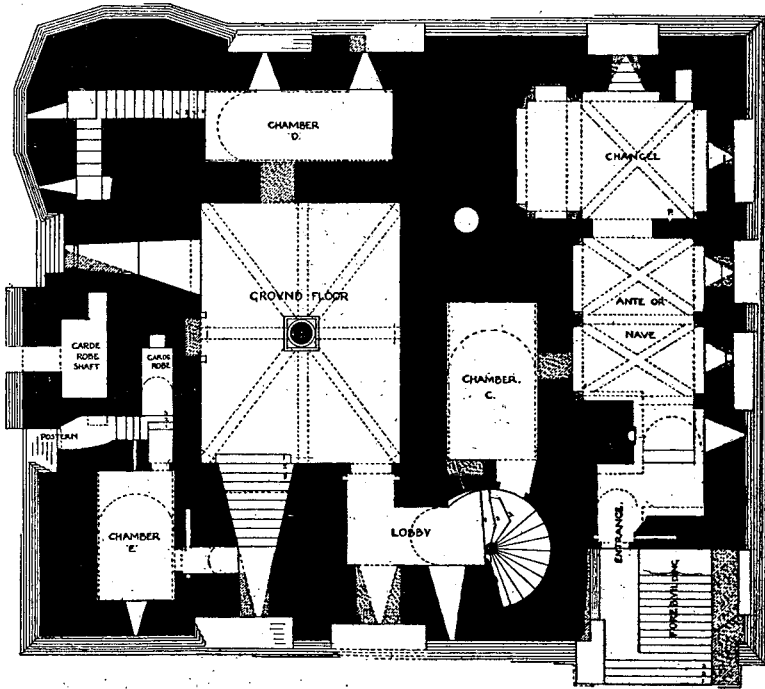


Fig. 17. Plan of Ground or Basement Floor.

and in it a small slit on to the stair. At the foot of the staircase is a short vaulted passage lighted by two loops. The head and splay of the jambs of one loop may be observed on the ceiling of the modern opening. An arched door with shallow holes for a falling bar on the lobby side, opens into the garrison room, which is enclosed by walls 15 to 18 feet in thickness.

GARRISON ROOM

The garrison room measures 27 feet by 20 feet 6 inches, and from the floor to the crown of the vault is 18 feet in height (Fig. 18). In the middle is a cylindrical pier 30 inches diameter, with double-moulded base and an octagonal scalloped capital (Fig. 19) with quirked hollow abacus from which spring longitudinal, transverse and diagonal chamfered ribs, dividing the ceiling into eight cells. The crown of the vault is level, and where it joins the wall plane is approximately flat-pointed in shape. The

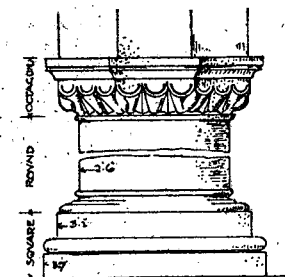


Fig. 19. Capital of Pier, Garrison Room.

longitudinal arches are half round, the diagonals flat semi, and the transverse semi but spring from a higher level (Fig. 4). On the wall side the ribs spring from chamfered corbels at different levels. The bed of the first course, over the capital is level, all other arch stones radiate. The centre pier is holed down the centre and communicates with one of the bucket recesses by the side of the well. The chamber is lighted by two loops placed high in the wall (Fig. 4), they have widely splayed jambs with vaulted ceiling finished with dressed voussoir on the interior face.

The chamber D shown on plan in the north wall has already been described in association with the survey of the first floor.

The only room E opening off the garrison room is that in the south-west angle; it has the usual vault and cornice. It measures 13 feet 6 inches by 8 feet, and is entered by a

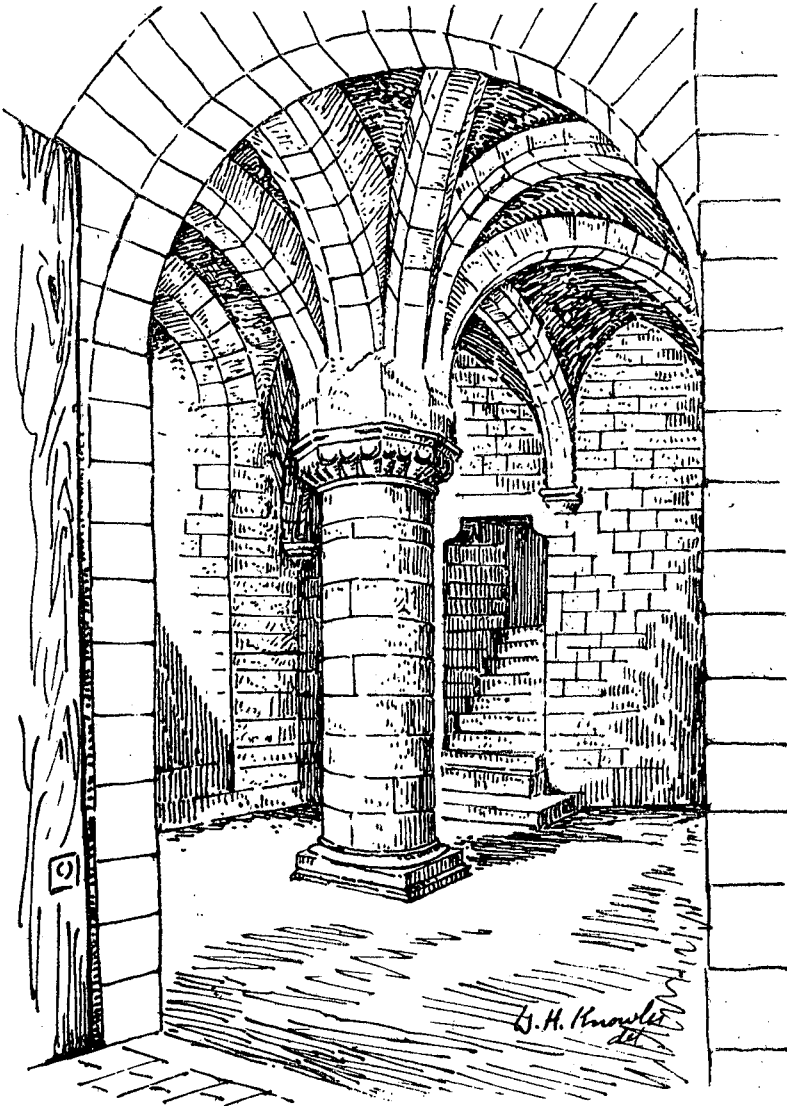


Fig. 18. The Garrison Room.

square-headed rebated door at the end of a short passage in the west jamb of the south window. The door was strengthened by a draw bar, the hole for which is on the out or passage side.²⁰ At the north end is a door giving on to a latrine which was originally lighted by a loop, afterwards enlarged and converted into a door whose sill is 12 feet above the outside level (Fig. 20). The alteration seems to have been effected at an early date. We may speculate as to the reason, but two purposes it certainly served. One as a

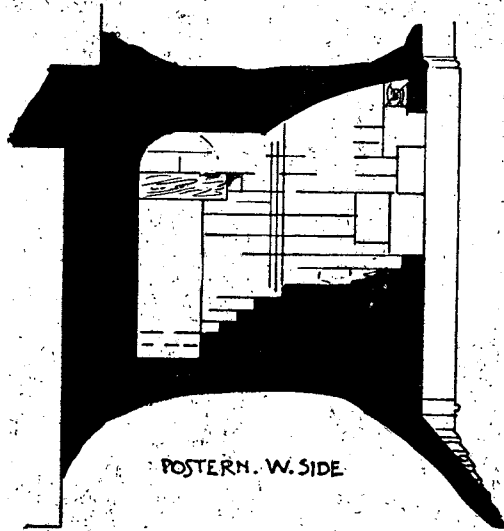


Fig. 20. Postern, West Elevation.

convenient place for the admission of stores which otherwise had to be carried up to the hall and down again to the garrison room, an arduous proceeding, and secondly it provided easy access to the curtain, the gate and the adjacent tower. There is a small opening 10 inches square about 5 feet from the floor, between the chamber and the lobby.²¹

²⁰ Suggesting the apartment was firstly used as a prison.

²¹ A very similar arrangement of chamber, garderobe and postern 15 feet above the outside level occurs in the east wall at Rochester, and Wakefield tower in London.

The large combined latrine shaft with an arched opening to the exterior for removing the refuse will be observed in the centre of the west wall.

THE CHAPEL

This occupies the whole of the basement below the forebuilding.²² Although very ornate, the work is not an example of thoughtful construction. It is very irregular in design and execution. The adjacent parts are clumsily brought together and rude in workmanship as compared with Maurice the architect's later work at Dover.

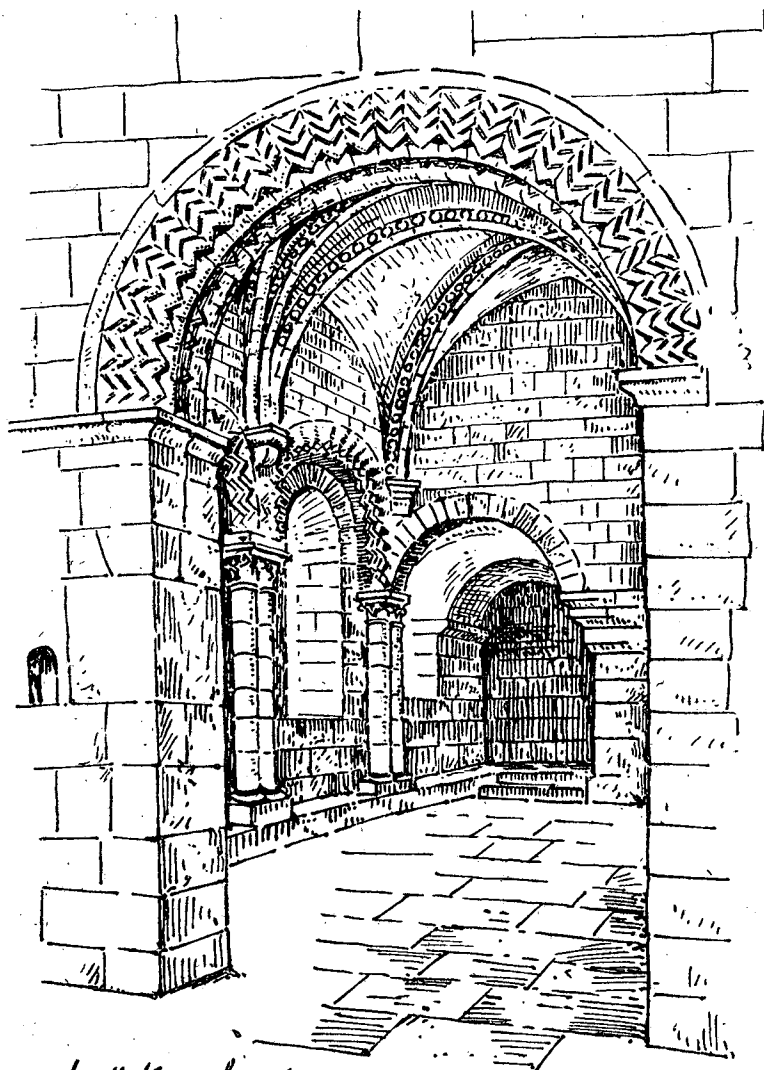
On plan (Fig. 17) the chancel is arranged east and west, with the nave or ante-chapel at right angles.²³ It is approached through a low L-shaped vestibule by a door at the south end, by the side of the forebuilding staircase. The door has a semi-tympanum shaped head under a relieving arch (Fig. 6), and was secured by a bar, the hole for which is in the east jamb.

The chancel measures into the western recess about 20 feet by 12 feet; it is lighted by two round-headed windows, one in the north and one in the east wall, below which stood the altar. In the south wall is a small mutilated piscina with rounded top²⁴ (Fig. 21), and opposite to it in the north wall a deep, round-headed aumbry. The chancel, except the recess, is 21 feet in height, and is ceiled with a quadripartite vault (Fig. 7), carried on deep diagonal ribs, moulded with a bold roll between hollows enriched with ball ornament, and springing from moulded angle corbels. The crown of the cells rise to the centre. The recess at the west end has a plain barrel vault, and the arch dividing it from the ribbed vault

²² At Old Sarum the chapel was similarly placed. See 1911 report on excavations.

²³ At Guildford is a smaller chapel, where the chancel and nave are at right angles, the altar being almost invisible from the nave.

²⁴ At Dover is an equally small piscina similarly despoiled.



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Fig. 21. The Chapel, looking South.



as also the wall arch, both without enrichments, modern.

Wide arcade-like arches enclose both windows; both are enriched with chevron ornament, that on the north wall with a double cone on the angle, whilst the chevron on the east side is worked on the face and underside without the double cone. They are carried on detached shafts with moulded bases and upturned voluted capitals with moulded abaci. Below the modern transverse arch are now twin shafts, but it is doubtful if this was the original form, they are part of the eighteenth century restoration.

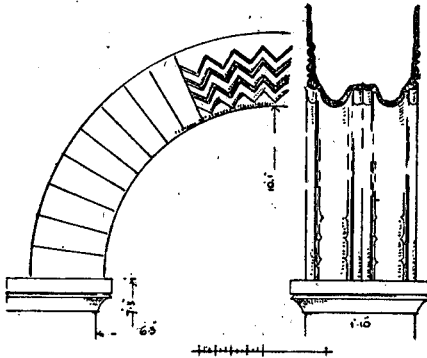


Fig. 22. The Chancel Arch.

The arch between the chancel and nave does not centre with the axis of the latter. It is semicircular, formed of two bold rolls with chevron ornament between and on the external faces (Fig. 22). The width between the jambs carrying the arch is 6 feet 3 inches, and the height to the top of the impost only about 7 feet. The jambs are square and the impost a quirked hollow below a flat face.

The nave or ante-chapel measures about 17 feet by 12 feet. It is vaulted in two bays and lighted by two round-headed windows now much enlarged. The east and west walls have semi-arcade arches carried on detached shafts in the angles, and in the middle of the wall face twin shafts in courses (Fig. 23). The shafts have moulded bases, and except that in the south-west angle, which is

scalloped, the capitals have volutes with moulded abaci. Three of the arches are enriched with chevron divided by a double cone, the fourth, the northernmost on the east wall, has a chevron worked on the face and underside (Fig. 23). The bays are vaulted in quadripartite form with diagonal ribs only, divided by a single transverse arch. There are no wall ribs. The crown of the cells rises to the centre. The ribs of the southern bay are moulded with a roll between hollows filled with ball ornament. The transverse arch is similarly enriched. The ribs of the northern bay are much more ornate, having

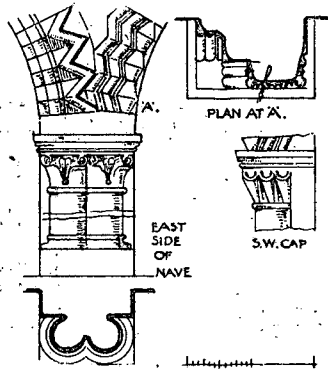


Fig. 23. East Side of Nave.

a double cone and chevron on either side (Fig. 7). The ribs spring from corbels, some with two and four horizontal rolls below a quirked hollow with flat face over. The transverse rib is stilted semi and the diagonals flat semi; all joints radiate. It will be observed on the sectional elevation (Fig. 7) that the crown of the vaults rise to the north.

The L-shaped vestibule, lighted by an unaltered narrow round window, is roofed with parallel barrel vaults with stone voissior to the ante-chapel. The vault springs from a single chamfered course on the east wall, two courses on the south, and three about the massive projection. In the west wall is a domical-headed stoup with hollowed projecting shelf.

GENERAL

Before leaving the keep and the contiguous curtains on the south and west side of it, we will glance for a moment at the obvious measures taken to impede a besieger. The keep, intended as a last resort, was in itself practically impregnable. Its great height enabled watchers to observe an enemy's movements over a considerable area. It was placed in juxtaposition to the gate and contiguous curtains to render effective assistance at a point where the castle was most easily approached from comparatively level ground (Plate II). This assistance was rendered from a sheltered bretashe or wooden hoarding, which enclosed and projected from the battlements, and enabled the defenders to attack from above all who ventured below. The chief entrance to the keep, as we have already observed, was placed high on the second floor level, and protected by a forebuilding (Fig. 7). It was difficult to attain, but equally inconvenient for hurried communication with the bailey walls. To overcome the last a postern was cleverly contrived in and masked by the middle gate tower of the forebuilding (Fig. 6). A probable second postern was that on the west wall near to a tower by the great gate (Fig. 20). Both are easily and directly reached by the garrison in the basement. A possible third postern occurred at the south-east angle of the first floor. Each would be provided with a stair or flying bridge easily destroyed to cut off pursuit.

A besieger might attempt to sap the curtains, or to erect a malvoisin or opposition tower as William II did when he besieged earl Mowbray at Bamburgh in 1095, or elect to make his attack by the great gate. If he chose the last method he had to pass over the causeway crossing the ditch, and defended with some form of barbican or covering outwork, furnished with a gate or drawbridge which fell on an isolated pier. Then to force the similar obstructions in the great gate itself (Plate II). If he then proceeded between the great gate and the keep, he found

himself in a cul-de-sac, baffled and put to confusion, and assailed on every side with various missiles, including those hurled from the top of the keep. Even if he made the correct, a left-handed turn, when he had penetrated the gate his further progress was difficult, the passage being narrowed by a tower seen in the sketch (Fig. 3), and other defences designed to oppose his advance into the outer bailey. When the latter had fallen, the inner bailey was yet strong enough to offer resistance, aided by the ever-active force stationed on the keep which commanded the whole.

Notwithstanding the strength of the massive towers such as that under consideration, these strongholds were soon discontinued. Intended as much to detect treason as to withstand attack, the narrow passages, galleries and communications were found to be too cramped and confused, and ill-suited for sorties or other movements of the defenders, or for escape if they were unable to hold out longer. As fortifications possessing the merit of passive resistance only they gave place to strategically designed outworks with flanking projections. As places of habitation they were gloomy and comfortless.

THE GREAT HALL

In the thirteenth century detached residential buildings comprising a hall, withdrawing room, kitchen and pantries became the fashion, and were soon provided at Newcastle as at Bamburgh and Carlisle. They were usually built against the curtain least accessible to the enemy, as at Durham, Warkworth, and Aydon.²⁵ The great hall at Newcastle was so placed against the east curtain on the edge of the steep slopes towards the Sandhill and Lort burn (Plate II).

In the Liberate roll of Henry III for 1237, within sixty years of the building of the keep, certain directions

²⁵ See *Archæologia*, LVI, 73.

are set out as to the great hall, showing that at that time it was in course of erection, a date consistent with the known details.

Fortunately in 1906, when excavations for the basement of the new county council offices were being made, I was able to see and obtain the exact position, dimensions and form of the hall there disclosed, and as shown on

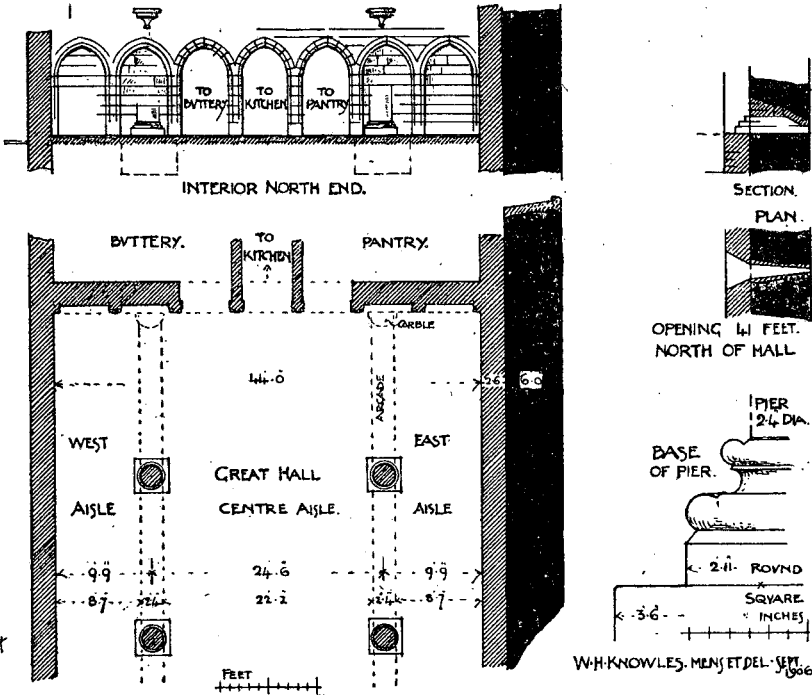


Fig. 24. Plan of the Great Hall.

Fig. 24. With this information and a sketch and notes by G. B. Richardson, quoted by Mr. Longstaffe in his most valuable paper on the castle,²⁶ but which he was unable rightly to interpret, we can form a tolerable idea of the hall.

Reference is also made in the rolls at different periods to the hall and the king's chamber with the cellar under-

²⁶ *Arch. Ael.*, N.S., IV, 45.

neath, and of the buttery, pantry and kitchen, clearly the stereotyped group arranged on the improved lines which distinguished domestic architecture during the reign of Henry III, and in later times was the accepted and convenient arrangement for manor houses and college halls in the old universities.

The hall with its usual adjuncts was erected contiguous to the east curtain. At the south end was the dais and the solar or withdrawing room, and at the opposite end the kitchen, buttery and pantry, the triple doors to which were grouped together. The hall entrance was in the west wall. In the drawings (Fig. 24) we have the lower end of the hall showing that it was of three aisles divided by an arcade of arches, as was usual when the width was exceptional, as in this case. The arches were carried on cylindrical piers, and at each end were supported on moulded corbels. The total width measured 44 feet, the centre aisle being 22 feet 2 inches and the side aisles 8 feet 7 inches. The side walls were 2 feet 6 inches thick and the diameter of the piers 2 feet 4 inches. The round-moulded base of the piers was worked over a sub-base 3 feet 6 inches square (Fig. 24). At 7 feet from the north wall was a built-up door opening broken through the curtain at a later date, and at 41 feet an outlet, probably a drain from the kitchen.

According to a sketch by G. B. Richardson²⁷ the north wall was arcaded with seven pointed arches; the three centre openings, Mr. Longstaffe observes, were "built up in brick, no doubt a window of three lights." I have ventured to interpret the sketch in true elevation, showing the three openings as doors, as such they undoubtedly were, giving access to the kitchen, buttery and pantry in the customary manner of the period. The position of the corbels is determined by the piers, which I measured, and the assumed elevation may be regarded as a justifiable reconstruction. Whether the arcade was carried round all the walls we cannot say, nor do we know the height

²⁷ *Arch. Ael.*, N.S., IV, 112.

of the hall. The position against the curtain precludes the possibility of windows on the east side. If the roof was unbroken from ridge to eaves the windows on the west side, unless they were very high, would afford insufficient light for so wide an area. Alternately the deficiency could be met by taking the windows above the eaves, as at Stokesay, or by the provision of clerestory windows over the arcade. In either case it is obvious that the hall was designed on an ambitious scale, and was unquestionably a fine example of thirteenth century work.

Mr. Longstaffe, commenting further on some sketches by G. B. Richardson, mentions one, "a ground sketch on which he supposes a row of four arches," but says he is unable to reconcile the sketch with other evidence. We do not know whether the sketch was an imaginary one or whether Richardson had some authority for it, but it is more than likely that the hall arcade was of that length. Halls of four bays are frequent, as at Oakham, Lincoln and Auckland. At Newcastle four bays yield a proportionate chamber about 66 by 44 feet, and exactly fills the allotted space on the general plan (Plate II). A near approximation to the Newcastle hall is that at Oakham, with aisles on either side four bays in length of almost identical dimensions. It is an earlier example with windows on either side and a continuous roof.²⁸

The references to the hall and "chamber," afterwards the moot hall and jury room,²⁹ are confirmatory of the position of the solar and consistent with the usual practice. Invariably the hall and its accompanying offices are solely within the inner bailey; at Newcastle the area was clearly insufficient for its accommodation, the major portion of the group being in the outer bailey.

²⁸ Turner's *Domestic Architecture*, frontispiece and p. 28 for view and plan.

²⁹ Richardson's *Table Book*.

THE BLACKGATE

Truly a grim, rugged and imposing structure, roomy on plan, and of considerable height as viewed from the north, where it rises from the steep declivity at the foot of which flowed a feeder of the Lort burn, now the Side.³⁰

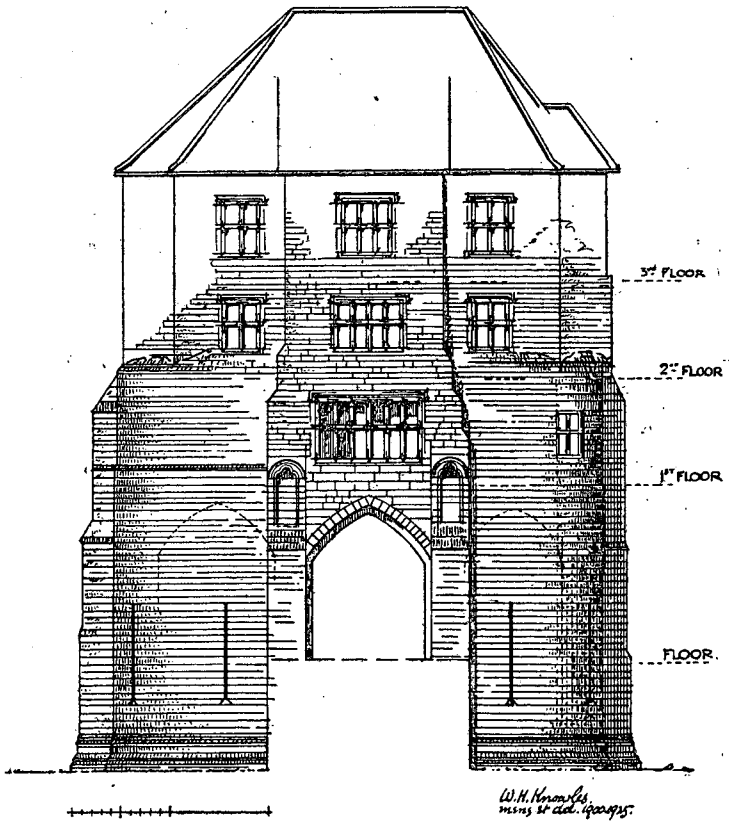


Fig. 25. West Elevation.

In a comparative state of ruin at the beginning of the seventeenth century it was converted to domestic purposes

³⁰ Blackgate so named after one Black who occupied the place in 1640. Not previously so called.



and its military character destroyed. Subsequently it was rudely shouldered by houses which abutted upon it, and was almost lost to view. Following on the construction of the railway bridge and consequent development of suitable approaches, much that was picturesque was destroyed, but the outline and aspect of the great gate was revealed.

We know that the cost was £514 15s. 11d., and that the date of its erection was from 1247 onwards.

Above we had occasion to recall the fact that twelfth century fortifications of the passive resistance form were abandoned in the thirteenth century in favour of skilfully designed surrounding walls and towers. In plan and disposition the Blackgate and contiguous buildings to the rear of it are most ingeniously contrived with the object of flanking the western curtain (Plate II). It is pushed forward in an irregular fashion well in advance of the old wall, and provides various salient angles from which to direct a fire upon an enemy. Naturally a point of attack and defence, the gate is brought into immediate association and combined with the other points of the castle, including the keep, in a remarkably clever manner. For the purpose intended, the Blackgate is an excellent example of a military structure skilfully planned.

Approximately oval on plan, the gate is pierced by a central passage flanked by semi-bastions measuring 50 feet over all (Fig. 26). It is set at an angle of 45 degrees with the west curtain and connected by an open space with a building which joins the curtain at right angles. In reality the latter was a second gate through the centre of which the passage was continued after changing direction in the intervening open space. The buildings which formed this second gate probably attained to a greater height than the rampart wall, which yet remains over 25 feet above the interior ground level, sufficient, with the destroyed battlements, even if not carried higher, to screen a lodging two or three stories in height (Plate III).

It is difficult, if not impossible to determine the original height of the Blackgate. Its upper stages in the

time of James I. were completely remodelled, and old walling material extensively re-used. It is safe to say there were three floors, a ground or basement, and two above (Fig. 25). Whether the old masonry above this level represents yet another floor or merely the battlements is doubtful. And again the change on plan from round to flat-faced masonry above the first floor level raises a point as to which form obtained before the alteration of James I period. There are many old stones in the straight walls, but I incline to the belief that they are re-used,³¹ and that the thirteenth century second floor was round on plan.

The height of the building from the plinth of four chamfered courses, seen on the north side, to the present eaves, is 63 feet (Plate III). It was divided into three stages by chamfered sets-off, the lower of one course, the upper of two or three courses.

The entrance (Fig. 25) is within a square projection carried to the roof, decreasing in width as it rises by weatherings, two on the north and three on the south side. The present six light window and the arch below are of Jacobean date, and fill what was originally a deep recess. The thirteenth century flat-pointed arch can be seen 5 feet from the outer face of the buttresses which flanked it; the latter have trefoil-headed niches worked on their outer faces³² (section through passage, Plate III). Possibly at the level of the present window-heads the recess between the buttresses was filled by machicolations, as at Monnow bridge, Monmouth,³³ which in outline and plan resembles the Blackgate.

The entrance passage (Fig. 26), 34 feet long by 11 feet 6 inches in width, is covered by a pointed, unribbed barrel vault. The outer arched aperture with square jambs to the field was closed by a drawbridge which fell

³¹ Witness the masonry between the niches of the portal, unmistakably re-used, yet cleverly done (Fig. 25).

³² The niches suggest doors on to a rampart wall, but access thereto from the interior is well-nigh impossible, and further, the continuous courses of the masonry across both recess and jambs is conclusive of their purpose (Fig. 25).

³³ *Military Architecture in England*, p. 297.

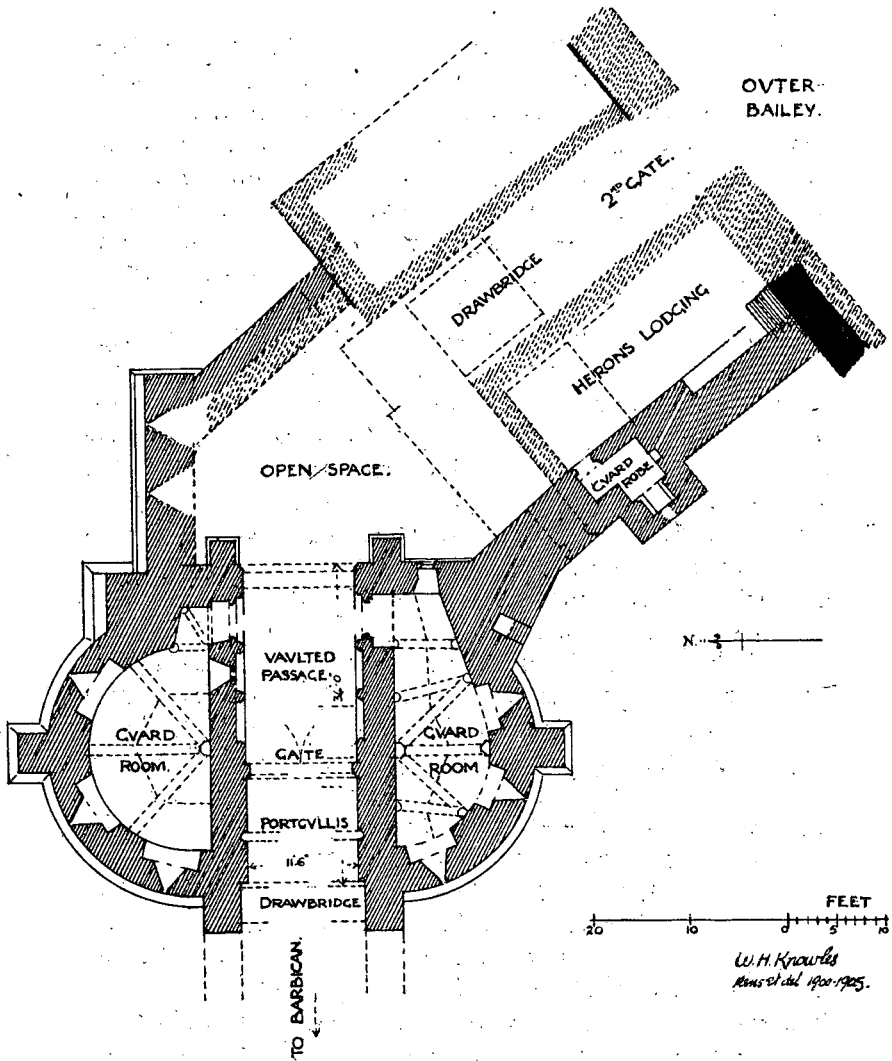
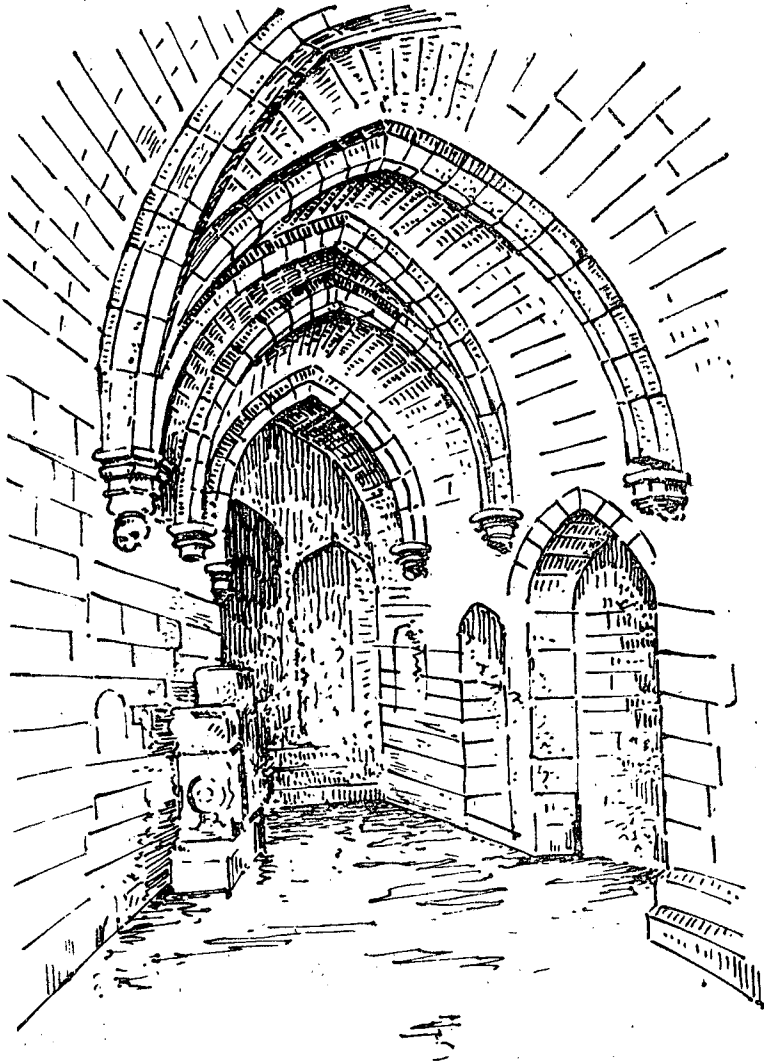


Fig. 26. Plan at Ground Floor Level.

upon a detached pier whence a causeway crossed the moat.

At 5 feet within the last is a groove for a portcullis, and at 11 feet a gate with an arch of two pointed chamfered orders to the exterior, and rebated within (Plate III). Between the portcullis and the gate is a *meurtrière* or opening from the chamber above. Within the gate on either side of the passage are two trefoil-headed recesses and a door leading into the guard chambers. The latter has a pointed arch of two chamfered orders within a label (Plate III). The inner portal has an arch of two chamfered orders, but no rebate for a gate. It was flanked by buttresses. See east elevation (Plate III) and plan (Fig. 26).

The guard chambers are not alike on plan, that on the north side of the passage being semicircular, that on the south less in size and partially round on plan (Fig. 26). The north chamber is entered through a small vestibule with a low-vaulted ceiling, having a diagonal rib and two arches on the open sides. In it are three eyelets or arrow slits with widely splayed jambs, and sloping sills which finish on the exterior much below the floor level in fantail form (Plate III). In the angle of the square head is a hollow moulding which dies into the splayed jambs. Each loop is placed in a square recess spanned by a flat-pointed arch. Overlooking the passage is a small, square-headed loop. The ceiling is curiously vaulted. It is carried by three pointed chamfered ribs which radiate from a single moulded corbel in the middle of the straight wall, but on the curved side of the chamber, spring as does the vault, directly from the wall face without corbel or cornice (Plate III). The south chamber has three eyelets to the field, identical with those in the north guard room. There is a small square window in the east end overlooking the area between the gates. The pointed vault is even more irregular in its design than that to the north chamber (Fig. 27). It is carried by four transverse and two diagonal chamfered ribs, all of which spring from moulded corbels, some round, some octagonal. The vault rises from the side walls without cornice, and the crown of the



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Fig. 27. The South Guard Chamber.

vault zigzags down the centre of the chamber as dictated by the varying spans of the cells (Fig. 26).

There is no indication of a staircase, nor, as is obvious

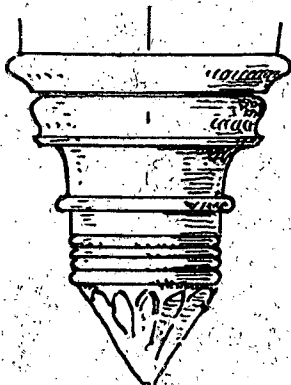


Fig. 28. Corbel, South Guard Room.

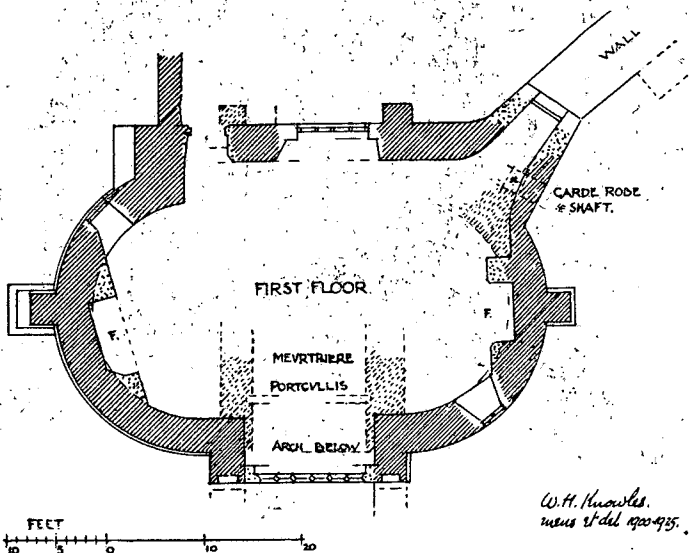


Fig. 29. The Ground Floor Plan.

on reference to the plan, could such be provided within the area of the gate. Access to the upper floor must therefore have been by external steps contrived in the

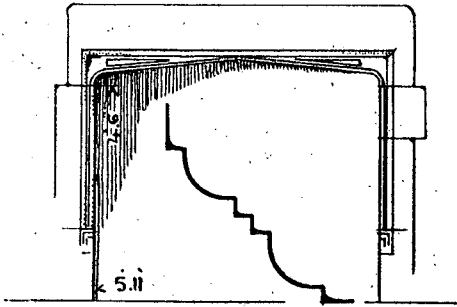


Fig. 30. Fireplace, First Floor.

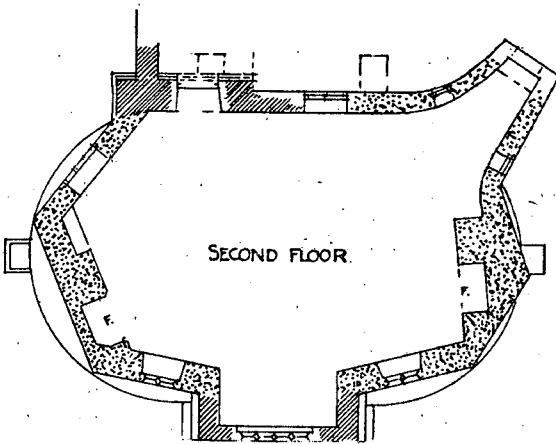
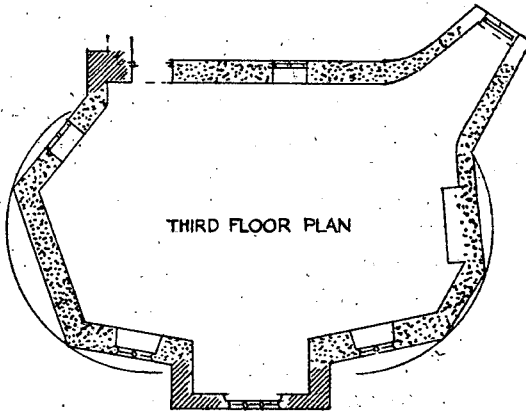


Fig. 31. Second and Third Floor Plans.

thickness or by the side of the curtain walls connecting the two gates or combined with the second gate (see below).

The first floor plan (Fig. 29) has been much altered, and the internal divisions removed; it is evident that the entrance to it was by two doors, one where is now a Jacobean opening, and the second off the south curtain where the wall expands in thickness as it joins the gate, and where also was a garderobe, the shaft for which is indicated on the plans. It is reasonable to assume that the floor was divided by walls carried on those below on either side of the passage. In any case the centre portion over the drawbridge and portcullis required a certain enclosure, as dotted on the plan, to receive the portcullis when raised, and for necessary apparatus for lifting the drawbridge. Further we may not speculate.

Of the second and third floors (Fig. 31) all that can be said is that they owe their present outlines to the successors of Alexander Stevenson, one of the pages of James' bed-chamber, to whom the castle was leased in 1619. To this period belong the various mullioned windows (Fig. 25), the fireplaces and also the door at the first floor level, seen on the east elevation (Plate III), which supplanted the thirteenth century entrance to the first floor.

HERON'S LODGING AND SECOND GATE

Until the year 1905 the walls north and south of the open area, approximately pentagonal on plan (Fig. 32), were imperfectly seen. Then the Newcastle Society of Antiquaries was enabled to make some excavations under my direction which led to the discovery of the Heron pit, the drawbridge pit and the postern. On the north the curtain wall 5 feet thick is loopholed at two stages over a massive plinth of five chamfered courses to the exterior, below which is a flat-pointed, arched opening (Plate III), apparently intended to serve the purpose of a moat, but found to interfere with the pits on the south side.

On plan (Fig. 32) the buildings abutting on the

Norman enceinte walls comprised a central passage in which was a drawbridge and gate, and on the south a

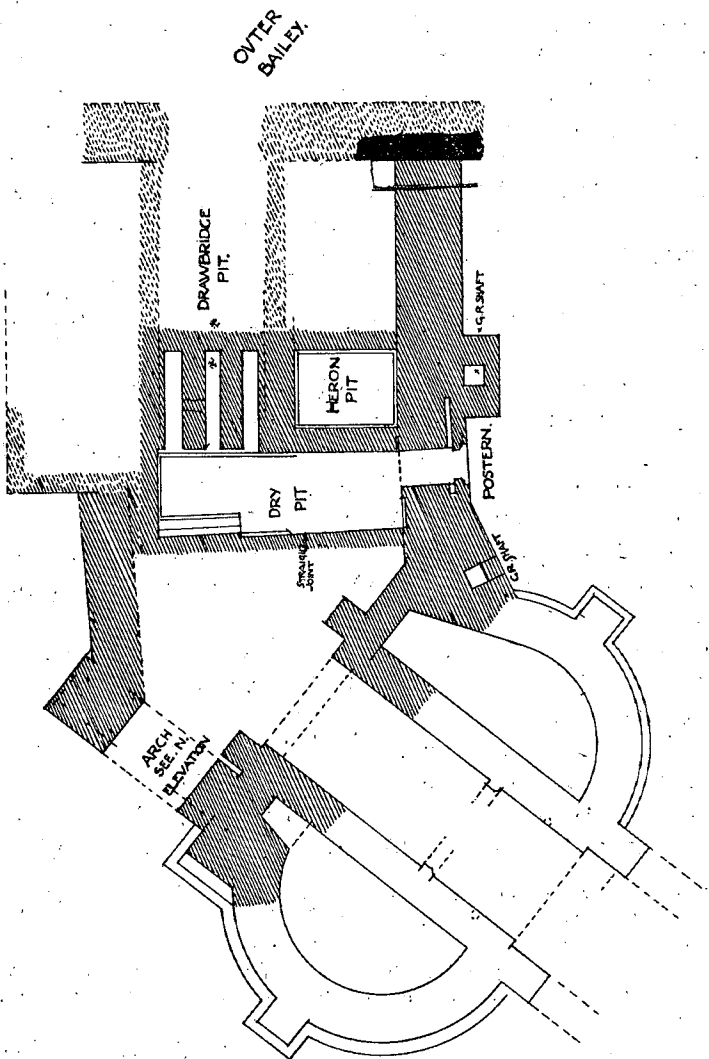


Fig. 32. Plan of Basement.

house with a pit below known as the "Heron pit,"³⁴ and

³⁴ So named after William Heron, sheriff of Northumberland and keeper of the castle from 1247 to his death in 1258 (*Proc. N.C. Soc. of Antiq.*, 3rd Ser., II, 196).

on the north a similar lodging,³⁵ with possibly the pit referred to as the great pit unless it was contained within the Norman tower, which enveloped the apex of the north bailey.³⁶ In the basement (Fig. 32) is a long, narrow pit before the drawbridge which extended to the south curtain, where is a postern protected by a draw bar. The postern is carefully screened by the gate, and the large pit is convenient for hurried movement of a number of men. In the north-west angle of the pit are some irregular projections, and on three sides a chamfered skirting (section Plate III), and in the centre of the west wall a straight joint which may indicate a real or intended association with the blind arch on the north side mentioned above.

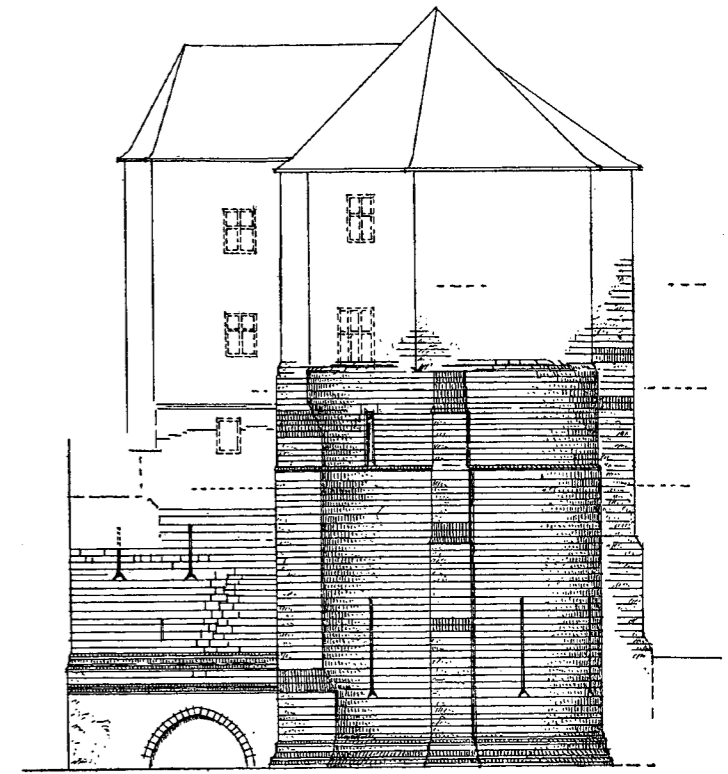
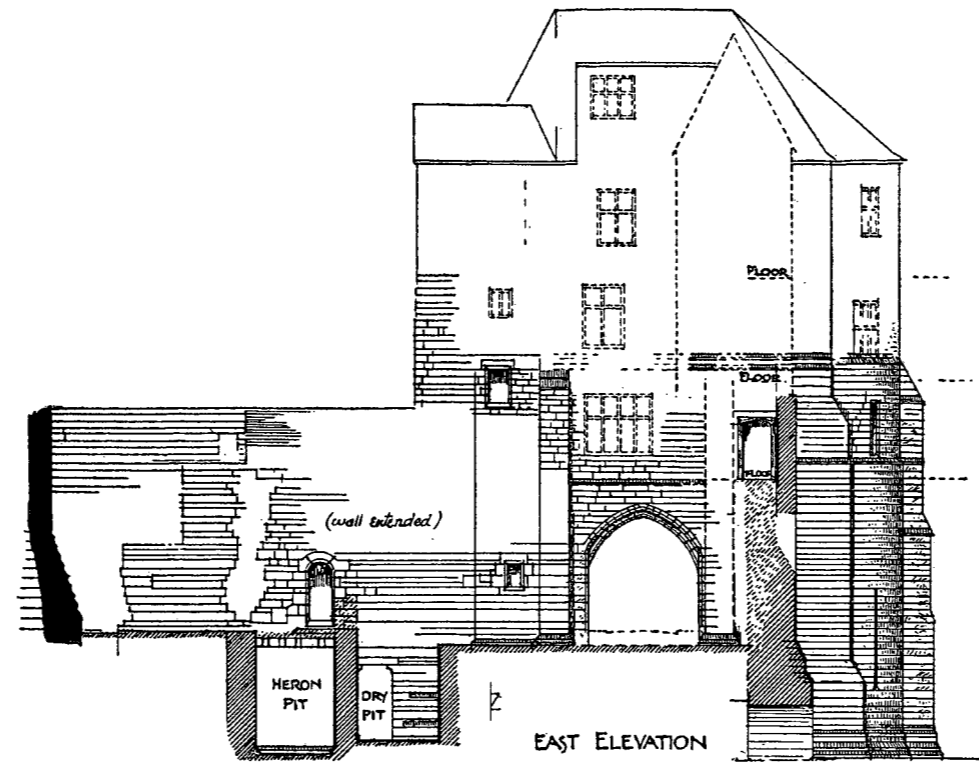
The area within the pit of the drawbridge is not altogether void, as was common, but is divided by two walls into three deep channels indicating that the bridge was balanced by weighted beams which rose and fell between the mid-walls. To the south of the drawbridge pit was the "Heron pit" or prison, with access only from the floor above (Plate III). Opening off the lodging at the ground floor level (Fig. 26) is a garderobe chamber within a square projection, in which is a seat and shaft. On the north of the passage was a building equal in area to that enclosing the Heron's pit.

The massive plinth of the twelfth century enceinte will be observed on the east elevation (Plate III).

Obviously the second gate was near the drawbridge, and united with the buildings on either side. When so

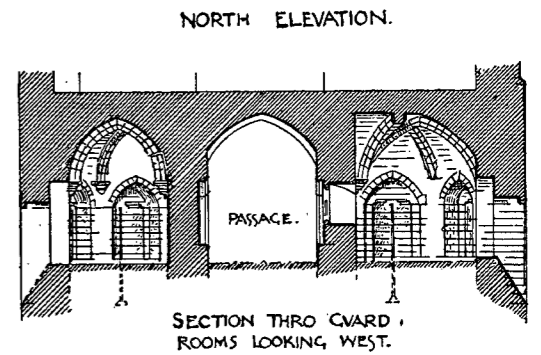
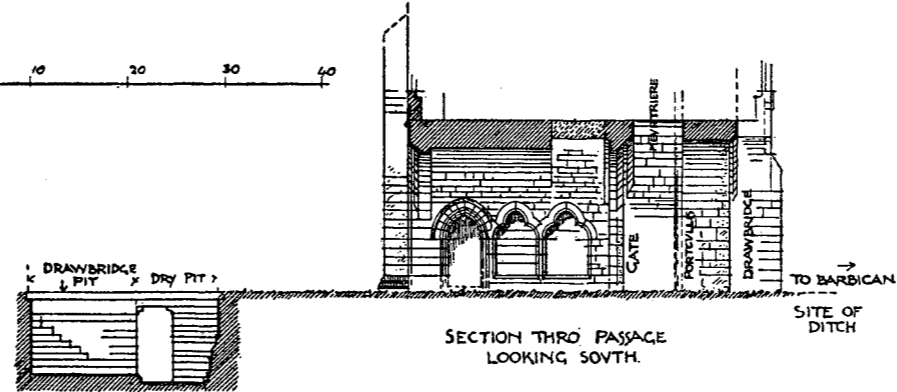
³⁵ Longstaffe, *Arch. Ael.* N.S., IV, 123. "The way through the yard," says the writer of the Milbanke MS., "begins at the castle gate, and when I was young there was no house in it but the house of one Thomas Southern, and the house of one Green. These houses were near the gate before you came into the castle yard."

³⁶ The great pit is referred to as nigh the second gate, but the inference that it was on the north of the passage is not beside the mark if the plan be consulted. The Heron pit is near the gate, and the great pit, if on the north of the passage, would be correctly described as nigh the second gate.



SCALE OF FEET.
 10 20 30 40

W. H. Knowles
 Meas. et del. 1900-1925.



THE BLACK GATE, NEWCASTLE UPON TYNE.



1884

1884

1884

regarded it was no mean structure, but approximated in size that at Alnwick Castle.³⁷ Taken together with the Blackgate, the latter appears a huge barbican, the upper floors of which might be connected with the second gate.

Of the indispensable barbican mentioned in 1358, and of the moat causeway and drawbridge which crossed it, there is now no precise record; the moat was probably wide and deep, much lower than is indicated by the level of the causeway and the base mouldings of the gate, as shown on the north elevation (Plate III).

³⁷ *Arch. Ael.*, 3rd Ser., V, pp. 289, 290.